Reply to Office Action of June 13, 2006

REMARKS

Claims 1-4 are pending in this application. Claim 1 is the only independent claim.

Reconsideration in view of the following remarks is respectfully solicited.

The Claims Define Patentable Subject Matter

The Office Action rejects:

Claims 1-4 are rejected under 35 U.S.C. §103(a) as being unpatentable over European

Patent No. EP 0718964 to Kennan (hereafter Kennan) in view of U.S. Patent No. 6,538,533 to

Hwang et al. (hereafter Hwang) and further in view of U.S. Patent No. 4,922,211 to Otremba et

al. (hereafter Otremba).

This rejection is respectfully traversed.

Applicant respectfully submits that the claimed invention is distinguishable from the new

combination of references, i.e., Kennan, Hwang and Otremba for at least the following reasons:

The Examiner admits that Kennan fails to disclose an electromagnetic coupling

preventing member as claimed, and a metal shielding box including one shielding chamber for

accommodating the plurality of local oscillators, each including a dielectric resonator, and the

preventing member. In an attempt to show this feature, the Examiner imports both Hwang and

Otremba. (see Office Action, page 3).

Specifically, the Examiner alleges that *Hwang* discloses two dielectric resonators, a metal

case and a screw arranged between the dielectric resonators (see Hwang col. 7, lines 43-52 and

Figs. 7A and 7B); and that Otremba discloses an oscillator with a dielectric resonator and a metal

housing and metal covers (see Otremba, col. 2, lines 12-18 and Fig. 1). (see also Office Action,

page 3).

However, even if Hwang discloses two resonators 71 in a metal case 65, Hwang fails to

disclose a plurality of local oscillators each including a dielectric resonator in such metal case 65.

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Hwang only discloses resonators being enclosed in its metal case 65. No local oscillators being paired with the resonators, as set forth in the claimed invention, are ever shown in Hwang.

Furthermore, Otremba merely discloses a <u>single</u> microwave oscillator which includes a hermetically sealed dielectric resonator 8. As such, Otremba fails to disclose a plurality of local oscillators each including a dielectric resonator being accommodated in a metal shielding box.

Furthermore, Otremba fails to disclose that the metal shielding box includes only one shielding chamber accommodating the plurality of local oscillators/resonators combinations. Instead, Otremba discloses a metal housing 1 formed with an offset step creating two regions; i.e., a lower region having a larger cross-section than an upper region. (see Otremba, Fig. 1). In Otremba, a film printed circuit board 4 is mounted in the lower region and its backside is metallized and facing toward the upper region of the metal housing 1. The lower side of the film printed circuit board 4 carries the elements of the active oscillator circuit. The dielectric resonator 8 in Otremba is mounted in a cylindrical cavity 6 which is laterally surrounded by the walls of the metal housing 1 and is terminated on its lower side by the film printed circuit board's metallized backside and on its upper sided by a silica glass plate 7. (see Otremba, col. 2, lines 12-51).

In other words, in *Otremba* the dielectric resonator itself is mounted in a hermetically sealed air-tight cavity inside a metal housing and the oscillator circuit is mounted in a separate lower cavity in the metal housing. (see *Otremba's* Fig. 1). As such, *Otremba's* metal housing not only fails to disclose a plurality of oscillator/resonators combinations, but *Otremba* also fails to disclose only one shielding chamber accommodating the plurality of local oscillators.

As such, <u>each</u> of *Kennan*, *Hwang* and *Otremba* fails to disclose a plurality of local oscillators each including a dielectric resonator being accommodated in a metal shielding box having only one shielding chamber, as set forth in independent claim 1.

Furthermore, *Hwang* fails to disclose an electromagnetic coupling preventing member as set forth in the present invention. As argued previously and never addressed by the Examiner, applicant respectfully submits that *Hwang* merely discloses that its coupling adjustment screw

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109 is arranged between the dielectric resonators. However, *Hwang* fails to disclose that such a screw 109 prevents an electromagnetic coupling between one and another one of the dielectric resonators.

In *Hwang's* limited disclosure about the screw 109, *Hwang* only discloses that it is arranged between the dielectric resonators. In *Hwang*, nothing further is disclosed about the coupling adjustment screw 109. As such, applicant respectfully submits that the Examiner is overreaching when the Examiner alleges that *Hwang's* screw 109 discloses an electromagnetic coupling preventing member as claimed.

In fact, *Hwang* only mentions electromagnetic coupling in relation with input/output probes 45 and 47. (see *Hwang*, col. 4, lines 12-19). For example, *Hwang* discloses that in the actual dielectric resonator filter 25 as shown in Figs. 1A and 1B, the dielectric resonators 37, 39, 41 and 43 are in the metal case ..., and coupling between the dielectric resonators is determined by electromagnetic coupling using a resonance mode TE_{01&} of the dielectric. Furthermore, *Hwang* discloses that the electromagnetic coupling quantities ... are determined by the intervals between the input/output probes and the input/output dielectric resonators, respectively. (see *Hwang*, col. 4, lines 51-63). As such, *Hwang* uses the intervals between the input/output probes and the intervals between resonators to determine the electromagnetic coupling. However, *Hwang* fails to disclose preventing such electromagnetic coupling and *Hwang* further fails to disclose using the screw 109 to prevent such electromagnetic coupling.

In addition, as mentioned previously, *Hwang* discloses using two electromagnetic wave absorbers 113 and 115 in the dielectric resonator filter. (see Hwang, col. 8, lines 14-58). However, such electromagnetic wave absorbers fail to be extending between any two of the dielectric resonators, as set forth in the present invention.

In other words, applicant submits that *Hwang*, like *Kennan* and *Otremba*, fails to disclose an electromagnetic coupling preventing member as set forth in the present invention because in *Hwang's* disclosure, *Hwang's* screw 109 fails to be expressly associated with electromagnetic coupling prevention.

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Applicant respectfully submits that where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it. See MPEP 707.07(f). The Examiner repeatedly fails to answer the substance of our traverses regarding the failure of the cited references to disclose an electromagnetic coupling preventing member.

To establish a *prima facie* case of Obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP 706.02(j).

Applicant respectfully submits that the examiner has failed to establish a *prima facie* case of obviousness at least in part because the examiner has failed to show how each and every feature is taught by the cited art.

Applicant respectfully submits that the combination of cited art fail to teach or suggest each and every feature as set forth in the claimed invention.

Applicant respectfully submist that independent claim 1 is allowable over the cited art for at least the reasons noted above.

As for each of the dependent claims not particularly discussed above, these claims are also allowable for at least the reasons set forth above regarding their corresponding independent claims, and/or for the further features claimed therein.

Accordingly, withdrawal of the rejection of claims 1-4 under 35 U.S.C. §103(a) is respectfully requested.

Conclusion

In view of the foregoing, Applicant respectfully submits that the application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

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Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact Carolyn T. Baumgardner (Reg. No. 41,345) at (703) 205-8000 to schedule a Personal Interview.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment from or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17; particularly, the extension of time fees.

Dated: September 11, 2006

Respectfully submitted,

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